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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,400	10/31/2006	Jan Peter Karel Van Koetsem	003D.0091.U1(US)	7645
29683. 7590 07/30/2007 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212			EXAMINER SMITH, CHAD	
			ART UNIT 2874	PAPER NUMBER
			MAIL DATE 07/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/568,400

Applicant(s)

VAN KOETSEM ET AL.

Examiner

Chad H. Smith

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. 10/568,400.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/13/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 – 5, 8 – 11 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al. (U.S. Patent # 6,811,322 B2).
2. Chen et al. teaches an optical board connector assembly for optically connecting an array of optical fibres to a circuit board embedded device (4) comprising: a connector housing (38) comprising a support structure (38a and 38c); at least one fibre fixation part characterized in that said fibre fixation part comprises a ferrule part for containing said optical fibres and a two-dimensional high-density array of holes (cavities) for receiving and containing (col. 3, lines 34-35, fig. 3 shows item 26a in an array of 1 x N fiber ends) optical fibers (26a, fiber runs through the holes (cavities) in the ferrule) and a support part (46) adapted to cooperate with said support structure such that said ferrule part protrudes at least partly from said connector housing (fig. 3, col. 3, lines 32 – 67, col. 4, lines 1 – 7). Furthermore, this fibre fixation part is for use in an optical board connector assembly (col. 3, lines 9 – 30).

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3. Regarding claims 2 and 3, Chen et al. teaches wherein said assembly comprises at least one resilient member (22) adapted to exert a force on said fibre fixation part in the direction of said protruding ferrule part (item 22 exerts equal and opposite force during a connection). Furthermore, the adapter is prebiased as it is positioned to accept the ferrule.

4. Regarding claim 4, Chen et al. teaches wherein said connector housing comprises a space adapted to accommodate said optical fibres in a variety of bending states (open area in fig. 3 of item 38 allows bending).

5. Regarding claim 8, Chen et al. teaches wherein said connector housing is adapted to allow float of said fibre fixation part in one or more directions (col. 4, lines 12 – 19).

6. Regarding claim 10, Chen et al. teaches wherein the fibre fixation part includes a location surface (22) positioned a distance from an outer surface of the ferrule part in the direction of protrusion of the ferrule part (fibre fixation part connects to the adapter, col. 3, lines 9 – 13).

7. Regarding claim 11, Chen et al. teaches wherein the location surface includes an opening for receiving an alignment pin (col. 3, line 37, and fig. 1 shows the pins on item 14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al.

(U.S. Patent # 6,811,322 B2) in view of Steinberg (U.S. PG Pub. # 2001/0055460).

9. The cited primary reference teaches the basic claimed optical board connector assembly as previously discussed in claim 1 above.

10. The cited primary reference does not teach the ferrule part comprising through-holes with substantially straight edges such as polygonal shaped.

11. The added secondary reference teaches d-shaped, rectangular shaped and diamond shaped cross sectional holes from which optical fibers are held (par. 0020).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Chen et al.'s optical board connector assembly with Steinberg's teaching of d-shaped, rectangular shaped and diamond shaped cross sectional holes from which optical fibers are held for using the connector assembly with polarized maintaining fiber (PMF) as the PMF would have the same shape as the holes so that the correct polarization alignment can be maintained for transceiving to polarization dependent modules.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Patent # 6,811,322 B2).

14. Chen et al. teaches the connector assembly coming together in figures 1 and 2 but is silent to wherein the connector includes a plate against which the location surface abuts. It is obvious to one of ordinary skill in the art that the plate which the location surface abuts is the front face of the connector holding the pins in figure 1 noted by the four rectangular plates visible in the drawing with two pins protruding from each.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad H. Smith whose telephone number is (571) 270-1294. The examiner can normally be reached on Monday-Thursday 7:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-270-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chad. H. Smith/
CHS

/Sung Pak/
Sung Pak
Primary Examiner
AU 2874